PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project
Multi-Year Plan Umatilla Subbasin Anadromous Fish Plan
BPA project number: 20523 Contract renewal date (mm/yyyy):Multiple actions?
Business name of agency, institution or organization requesting funding
Business acronym (if appropriate) CBFWA
Proposal contact person or principal investigator: Name Tom Giese
Mailing Address City, ST Zip Phone 503-229-0191 Fax Email address
NPPC Program Measure Number(s) which this project addresses
FWS/NMFS Biological Opinion Number(s) which this project addresses
Other planning document references
Short description
Target species
Section 2. Sorting and evaluation
Subbasin Umatilla

Evaluation Process Sort

CBFWA caucus Special evaluation process		ISRP project type		
	If your project fits either of			
Mark one or more	these processes, mark one			
caucus	or both	Mark one or more categories		
☐ Anadromous	☐ Multi-year (milestone-	☐ Watershed councils/model		
fish	based evaluation)	watersheds		
Resident fish	☐ Watershed project	☐ Information dissemination		
☐ Wildlife	evaluation	Operation & maintenance		
		☐ New construction		
		Research & monitoring		
		☐ Implementation & management		
		☐ Wildlife habitat acquisitions		

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

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Project #	Project title/description		
20523	MYP Umatilla Anadromous Fish Plan		
8902700	Exchange WEID withdrawal at 3-Mile Dam w/Columbia River water.		
8343600	Ongoing screen/ladder O&M.		
802200	Ongoing trap-&-haul operations at thermal & low flow blocks.		
8710001	Implement stream/riparian habitat improvements.		
8710002	Implement stream/riparian habitat improvements.		
9092	Augment CTUIR enforcement program.		
8343500	Operate/maintain acclimation/release & adult holding facilities.		
8903500	O&M for Umatilla Hatchery.		
8805302	Design/construct incubation/rearing capacity at S.Fork Walla Walla facility		
8902401	Monitor operation of screens & juvenile/adult passage.		
9000500	Monitor hatchery operations and releases.		
9000501	Monitor natural production.		
8903701	Determine feasibility of releasing unallocated McKay Reservoir storage.		
9604500	Habitat improvements.		
9606800	Habitat improvements.		
8710000	Habitat improvements including removal of blockage at Meachum Cr.		
9506000	Protection of Squaw Creek riparian habitat.		
8433000	Design/build chinook/steelhead hatchery adjacent to Irrigon Hatchery.		
9101400	Build Imeques & Thorn Hollow acclimation/release facilities.		

Other dependent or critically-related projects

Project # Project title/description		Nature of relationship	

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?

Objectives and tasks

Obj		Task	
1,2,3	Objective	a,b,c	Task
1	Improve lower Umatilla survival	a	Improve flows in the mainstem and
	during rearing and juvenile		improve down/upstream passage at
	migrations.		mainstem diversions.
		b	Reduce high water temperatures and
			sedimentation, increase pool-to-
			riffle ratio through watershed
			protection and riparian/instream
			enhancements.
		c	Assess progress and adapting
			strategies through monitoring and
			evaluation (addressing subbasin
			information needs).
2	Improve adult migration success.	a	Improve flows in the mainstem and
			improve down/upstream passage at
			mainstem diversions.
3	Improve adult holding and	a	Improve flows in the mainstem and
	juvenile rearing survival in upper		improve down/upstream passage at
	Umatilla.		mainstem diversions.
		b	Reduce high water temperatures and
			sedimentation, increase pool-to-
			riffle ratio through watershed
			protection and riparian/instream
			enhancements.
4	Improve fall chinook spawning	a	Reduce high water temperatures and
	success.		sedimentation, increase pool-to-
			riffle ratio through watershed
			protection and riparian/instream
			enhancements.

		b	Improve flows in the mainstem and improve down/upstream passage at
			mainstem diversions.
		С	Assess progress and adapting strategies through monitoring and evaluation (addressing subbasin information needs).
5	Release additional genetically-appropriate salmon in the subbasin.	a	Provide hatchery production (with acclimation/release near natural spawning areas) using Umatilla broodstock (with satellite adult capture/holding) and natural production.

Objective schedules and costs

Obj#	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
				Total	0.00%

Schedule constraints	
Completion date	

Section 5. Budget

FY99 project budget (BPA obligated):

FY2000 budget by line item

		% of	
Item	Note	total	FY2000
Personnel		%0	
Fringe benefits		%0	
Supplies, materials, non-		%0	
expendable property			
Operations & maintenance		%0	
Capital acquisitions or		%0	
improvements (e.g. land,			

buildings, major equip.)			
NEPA costs		%0	
Construction-related		%0	
support			
PIT tags	# of tags:	%0	
Travel		%0	
Indirect costs		%0	
Subcontractor		%0	
Other		%0	
TOTAL BPA FY2000 BUDGET REQUEST			\$ 0

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
		%0	
		%0	
		%0	
		%0	
Total project cost (including BPA portion)			\$ 0

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget				

Section 6. References

Watershed?	Reference
\boxtimes	Draft Multi-Year Anadromous Fish Plan, CBFWA, February 4, 1998
	FY1999 Draft Annual Implementation Work Plan, Vol. 1 Tab. 5, CBFWA
	May 13, 1998

PART II - NARRATIVE

Section 7. Abstract

(Replace this text with your response in paragraph form)

Section 8. Project description

a. Technical and/or scientific background

(Replace this text with your response in paragraph form)

b. Rationale and significance to Regional Programs

The Umatilla River Subbasin is located in Umatilla County in northeast Oregon and covers 2,290 square miles. The Umatilla River originates on the west slope of the Blue Mountains in the Umatilla National Forest and flows northwesterly about 115 miles to the Columbia. The subbasin consists of the high relief Blue Mountains region, with elevations from 3,000 to 6,000 feet, and the Deschutes-Umatilla Plateau, a broad upland plain that slopes northward from the Blue Mountains to the Columbia River.

Approximately 51 percent of the Umatilla subbasin is privately owned; 37 percent is managed by federal agencies, principally the U.S. Forest Service; 1 percent is owned by the state of Oregon; and about 11 percent lies within the boundaries of the Umatilla Indian Reservation. Forest lands in the subbasin are managed for timber harvest, grazing and recreation. Much of the mid-subbasin is used for dry land wheat farming. Irrigation is the largest use of surface and groundwater in the subbasin, and many of the streams are over-appropriated. Seven irrigation diversion dams on the mainstem Umatilla River obstruct upstream and downstream migration of anadromous fish. Passage improvements are planned or completed at all of these.

The indigenous anadromous fish species most actively targeted for management in the Umatilla River Subbasin are spring and fall chinook (extirpated and reintroduced), summer steelhead, coho (extirpated and reintroduced), and Pacific lamprey. The goal for these species is to restore sustainable, naturally producing populations to support tribal and non-tribal harvest and cultural and economic practices while protecting the biological integrity and the genetic diversity of the watershed.

Water quantity and quality problems (e.g., low flows and high temperatures) result in poor survival during juvenile rearing and migration in the lower Umatilla River. Low flows and diversion barriers restrict adult migration and riparian degradation and lack of pools reduces adult holding and juvenile rearing survival in the upper reaches of the Umatilla subbasin. Water quantity, quality, and sediment problems reduce the success of fall chinook spawning. These problems have caused major habitat fragmentation and poor connectivity, and lead to the extirpation of spring and fall chinook, and coho, and have reduced populations of summer steelhead. This has greatly reduced productivity and has lead to loss of harvest opportunities.

c. Relationships to other projects

Specific actions to implement these strategies include improving flows in the Umatilla mainstem (addressing Objectives 1,2 & 4) by exchanging the West Extension Irrigation District (WEID) withdrawal at Three Mile Dam with Columbia River water with operating costs funded by BPA (#8902700). This project also funds operating costs

for exchanging mainstem Umatilla water that was withdrawn at Stanfield to refill Cold Springs Reservoir, with water pumped from the Columbia River allowing formerly diverted flows to remain in the Umatilla (Columbia River Pumping Plan - Phase II). The query for Congressional appropriations to develop water exchange with Westland Irrigation District (Columbia River Pumping Plan - Phase III) continues. Improvements to upstream/downstream fish passage at Umatilla mainstem diversions have largely been implemented and are now in O&M mode. On-going screens & ladder O/M is implemented under project #8343600, and on-going trap-and-haul operations to move adults and juveniles around thermal and low flow blocks that remain is implemented under #802200.

Projects #8710001 and #8710002 implement stream and riparian habitat improvements (fencing, instream structures for pools, bank stabilization and riparian plantings on private and federal land). Project #9092 will augment the CTUIR enforcement program in order to enforce land and water use practices, and other harvest restrictions in order to protect these investments.

Production actions addressing Objective 5 include operating and maintaining the acclimation/release facilities at Bonifer and Minthorn Springs and adult holding at Minthorn (#8343500 – listed under Walla Walla). O/M for the Umatilla Hatchery is funded under #8903500. Additional incubation/rearing capacity for Umatilla-bound chinook was recently completed at the South Fork Walla Walla facility, designed and constructed with funds under #8805302.

Several actions are being implemented in order to assess progress and adapt strategies through monitoring and evaluation (addressing subbasin information needs). Operation of screens and juvenile and adult passage is monitored under #8902401; hatchery operations and releases under #9000500; and, natural production under #9000501.

BPA funded #8902701 to determine the feasibility of releasing 6000 acre-feet of unallocated storage in McKay Reservoir for fish passage and temperature control in the Umatilla mainstem – this action is not being pursued at this time. The BPA funded the COE to blast a channel below Three Mile Dam to concentrate the little remaining instream flows. BPA funded new state-of-the-art screens and ladders at Stanfield, Maxwell, Three Mile, Westland, Feed/Cold Springs, and other diversions. Habitat improvement work has included projects # 9604500, 9606800, and 8710000 (which funded the removal of low flow blockage of Meachum Creek due to alluvial deposits). The Squaw Creek riparian habitat is protected through land purchase, jointly funded from Anadromous Fish and Wildlife budgets (#9506000). BPA funding was used to design and build a chinook and steelhead hatchery adjacent to the Irrigon Hatchery (#8433000); and build Imeques and Thorn Hollow acclimation/release facilities and an additional facility design (#9101400).

d. Project history (for ongoing projects)

(Replace this text with your response in paragraph form)

e. Proposal objectives

The co-managers have adopted the following outcome-based objectives in order to address the problems that anadromous fish face while in the Umatilla Subbasin: 1) improve lower Umatilla survival during rearing and juvenile migration; 2) improve adult migration success; 3) improve adult holding and juvenile rearing survival in the upper Umatilla; 4) improve fall chinook spawning success; and, 5) release additional genetically-appropriate salmon in the subbasin.

Several broad strategies have been identified to achieve these objectives, including improving flows in the mainstem and improving upstream/downstream passage at mainstem diversions; reducing high water temperatures, sedimentation, and increasing the pool-to-riffle ratio through watershed protection and riparian and instream enhancements; providing hatchery production (with acclimation/release near natural spawning areas) using Umatilla broodstock (with satellite adult capture/holding) and natural production; and assessing progress and adapting strategies through monitoring and evaluation (addressing subbasin information needs).

f. Methods

(Replace this text with your response in paragraph form)

g. Facilities and equipment

(Replace this text with your response in paragraph form)

h. Budget

(Replace this text with your response in paragraph form)

Section 9. Key personnel

(Replace this text with your response in paragraph form)

Section 10. Information/technology transfer

(Replace this text with your response in paragraph form)

Congratulations!